REMARKS

The Examiner's position appears to be that although *Kingsbury* fails to teach claim 1's step of

"modifying a new-message slot to specify an intended recipient of said message,:

that limitation is nevertheless disclosed by *Creswell*. The reason advanced for combining these two references is that doing so would enable "time dependent messages to be accessed by recipients."

Creswell

Creswell discloses a system in which the content or recipient of an e-mail message changes depending on when the message is delivered. These messages are stored in a message storage device **50** (see FIG. 1). A list of alternate recipients is stored in a table (see col. 4, lines 58-60).

SECTION 103 REJECTION OF CLAIM 1

Applicant submits that the section 103 rejection of claim 1 is improper for two independent reasons. First, the references appear to have been combined in hindsight, and second, the references, even if combined, fail to meet the claim limitation.

No motivation to combine the references

The message slots in *Kingsbury* each have a message field and a length field. There is no need for a recipient field in these message slots because the slots are *already* in the recipient's mailbox.

Despite this, the Examiner proposes to somehow modify *Kingsbury* to accommodate the e-mail messages described in *Creswell*. It is unclear how one would make the proposed modification. However, it seems reasonable that one would begin by adding a recipient field in the *Kingsbury* message slots. But, as noted above, such a field would:

- be useless since the message slots are already in the recipient's mailbox; and

- be worse than useless because such a field would consume space that could have been used for the actual message.

Having added this recipient field, notwithstanding the above disadvantages, one would then wait some interval, confirm that the message has not been accessed, and then modify the message's addressee.

The foregoing procedure makes little sense because even if one were to modify the message, there would be no simple way to deliver it. The message would, after all, be in a recipient's mailbox. Therefore, it would not be expected to go anywhere until the recipient has accessed it. And if the recipient were to access it, there would be no reason to have modified it. After all, the whole point of modifying the addressee in the first place was to communicate the message to the next addressee in case the recipient had not accessed it.

In fact, the only reason for adding a recipient field to a *Kingsbury* message slot would be to be make the hindsight combination of *Kingsbury* and *Creswell*. *Kingsbury* certainly never suggests any need to automatically send additional messages if a recipient has not read a messaged by a particular time.

Accordingly, Applicant submits that the proposed combination of *Kingsbury* and *Creswell* is improper and that the section 103 rejection should be withdrawn.

Creswell fails to disclose modifying a message slot

The Examiner's comments suggest that each individual message in the message store **50** is regarded as a "new-message slot."

Creswell certainly discloses messages stored in a memory. It also discloses that the same message can be sent to different persons (i.e., "alternate recipients") at different times. It also discloses that different messages can be sent to different persons at different times. However, *Creswell* certainly does not disclose *modifying* a message.

In *Creswell*, alternate recipients are listed in a look-up table. Thus, when the *Creswell* system determines that it is time to send a message to the next recipient on the list, it simply looks up the appropriate person on this table, identifies the correct recipient, and sends the message to that recipient. There is no indication that this involves modifying a message slot. The disclosed procedure is merely a matter of looking up an addressee and sending the same, unmodified message to that addressee.

Another approach disclosed by *Creswell* is to include, in the message itself, a list of recipients together with the time at which each recipient is to be sent a message. In that case, the *Creswell* system would again simply inspect the message to determine to whom the message should be sent, and then send the message. While this involves inspecting the message, it does not involve *modifying* the message as recited in the claim.

The remaining claims are dependent on claim 1 and are therefore patentable for at least the same reasons as discussed in connection with claim 1.

SECTION 103 REJECTION OF CLAIM 2
Claim 2 recites the additional limitation of

> inserting said new-message slot into said message list, said message list including a first existing-message slot having a pointer to a second existing-message slot

The Examiner suggests that this step is disclosed in paragraphs 34-36 of *Kingsbury*. It appears therefore that the Examiner considers the message slots **80** in FIG. 5 to correspond to the message slots recited in the claim.

Applicant draws attention to the requirement that the message list include "a first existing-message slot *having a pointer* to a second existing-message slot."

There is no suggestion that any of the message slots **80** have a pointer. It is true that the storage location *tail* **76** has a pointer to the last filled message slot, and that the storage location *head* **78** has a pointer to the next unread message. But neither *head* **78** nor *tail* **76** are message

slots. Accordingly, *Kingsbury* fails to disclose "a first existing-message slot *having a pointer* to a second existing-message slot."

In addition, claim 2 recites "inserting said new-message slot into said message list."

The cited paragraphs teach placing messages into *existing* message slots. There is no teaching of *inserting* a message slot into the list of message slots **80** shown in FIG. 5. Accordingly, *Kingsbury* fails to teach "inserting" a new message slot into a message list.

Based on the foregoing, the section 103 rejection of claim 2 is improper. Claims 3 and 4 are likewise patentable for at least the same reasons as claim 2.

SECTION 103 REJECTION OF CLAIM 5
Claim 5 recites the additional limitation of

"modifying a destination mask associated with said new-message slot, said destination mask including information specifying all intended recipients of said message"

It is unclear where the Examiner has identified a destination mask. Applicant speculates that the list of alternate recipients (e.g. Table 2) in *Creswell* is regarded as a destination mask.

It is clear from Applicant's specification that a mask, whether it be a destination mask, an attention mask, or an execution mask, is a set of data elements, with a subset of those elements being assigned to each processor. In the illustrated embodiment, the data element is a bit.

Such masks are often used in data processing to coordinate the activity of multiple processors because the flipping of bits can be carried out quickly. However, such masks also impose an upper limit on the number of processors that can be coordinated.

The list of alternate recipients has neither of these properties. For example, the list shown in Table 2 can be extended arbitrarily. In addition, there is no simple way (such as by flipping a bit) to indicate on Table 2 that a particular recipient has taken some action. Since Table 2 lacks properties of a mask, it cannot be considered a mask.

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Applicant submits that the section 103 rejection of claim 5 is improper for the additional reasons set forth above. Claim 6, which includes all the limitations of claim 5, is allowable for at least the same reasons as claim 5.

SECTION 103 REJECTION OF CLAIM 7
Claim 7 recites the additional limitation of

> "updating a message directory to indicate the presence of said new-message slot in said message list, said message directory being accessible to said plurality of processors"

As best understood, the Examiner considers the claimed "message directory" to be the combination of the storage locations *n_present* **72**, *n_reserved* **74**, tail **76**, and *head* **78** in FIG. 5. These four storage locations collectively enable a processor to identify the presence of a new message.

As a threshold matter, Applicant draws attention to claim 7's requirement that the claimed "message directory" be accessible to the plurality of processors. The entire mailbox data structure **70**, including the above-mentioned four storage locations, is accessible *only* to the processor that owns it. It is not accessible to the plurality of processors. Hence, the combination of references fails to meet the claim limitation of a message directory "accessible to said plurality of processor."

Applicant also draws attention to the distinction between a *message* and a *slot*. *Kingsbury* teaches updating the "message directory" to identify the presence of a new *message*. However, this is not the same as updating the message directory to indicate the presence of a new *slot*.

In fact, the number of message slots **80** in *Kingsbury* appears to be fixed. There is no dynamic insertion and deletion of message slots. Hence, there would be no purpose in updating a message directory to indicate the presence of a new message slot.

Claims 8-9 depend on claim 7 and are allowable for at least the same reasons as claim 7.

SECTION 103 REJECTION OF CLAIM 8

Claim 8 requires the additional limitation of

"updating an attention mask containing information indicative of which processors from said plurality of processors are intended recipients of messages contained in said message list"

It is unclear what the Examiner regards as an "attention mask." According to the claim limitation, the attention mask must indicate which processors are intended recipients of a message contained in the message list. Furthermore, the attention mask must be part of whatever structure the Examiner regards as corresponding to "the message directory."

As best understood, the Examiner regards the four storage location **72, 74, 76, 78** in FIG. 5 as collectively being the "message directory" and the remaining storage locations as being the "message list."

But, as the Examiner has already agreed, none of the storage locations in FIG. 5 contain information referring to recipients because the entire data structure in FIG. 5 is accessible only to one processor. In fact, it was to overcome this deficiency in the teaching of *Kingsbury* that the Examiner recruited *Creswell* in the first place.

Hence, it is not apparent what the Examiner regards as an attention mask that contains "information indicative of which processors from said plurality of processors are intended recipients of messages contained in said message list." Accordingly, Applicant submits that the pertinence of each reference must be clearly explained as required by Rule 1.104(c)(2). In view of this deficiency in the present office action, Applicant requests that the next office action be non-final. Alternatively, Applicant requests withdrawal of the rejection.

SUMMARY

Now pending in this application are claim 1-9, of which claim 1 is independent. No additional fees are believed to be due in connection with the filing of this response. However, to

the extent fees are due, or if a refund is forthcoming, please adjust our deposit account 06-1050, referencing attorney docket "07072-127001."

Respectfully submitted,

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